

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)



REC'D 17 AUG 2006

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Applicant's or agent's file reference PCTA9504-202	FOR FURTHER ACTION		See Form PCT/IPEA/416
International application No. PCT/KR2005/001250	International filing date(day/month/year) 29 APRIL 2005 (29.04.2005)	Priority date (day/month/year) 30 APRIL 2004 (30.04.2004)	
International Patent Classification (IPC) or national classification and IPC B32B 27/02(2006.01)i			
Applicant Sambark Co., LTD. et al			

- This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 3 sheets, including this cover sheet.
- This report is also accompanied by ANNEXES, comprising:
 - ☐ (sent to the applicant and to the International Bureau) a total of _____ sheets, as follows:
 - ☐ sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
 - ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
 - ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____ containing a sequence listing and/or tables related thereto, in electronic form only, as indicated in the Supplemental Box relating to Sequence Listing (see Section 802 of the Administrative Instructions).

- This report contains indications relating to the following items:
 - ☒ Box No. I Basis of the report
 - ☐ Box No. II Priority
 - ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - ☐ Box No. IV Lack of unity of invention
 - ☒ Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - ☐ Box No. VI Certain documents cited
 - ☐ Box No. VII Certain defects in the international application
 - ☐ Box No. VIII Certain observations on the international application

Date of submission of the demand 13 FEBRUARY 2006 (13.02.2006)	Date of completion of this report 18 JULY 2006 (18.07.2006)
Name and mailing address of the IPEA/KR  Korean Intellectual Property Office 920 Dunsan-dong, Seo-gu, Daejeon 302-701, Republic of Korea Facsimile No. 82-42-472-7140	Authorized officer KANG, SANG YOON  Telephone No. 82-42-481-8153

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/KR2005/001250

Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☒ This report is based on translations from the original language into the following language English which is the language of a translation furnished for the purposes of:
 - ☐ international search (under Rules 12.3 and 23.1(b))
 - ☒ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:
 - ☒ the international application as originally filed/furnished
 - ☐ the description:
 - pages _____ as originally filed/furnished
 - pages* _____ received by this Authority on _____
 - pages* _____ received by this Authority on _____
 - ☐ the claims:
 - pages _____ as originally filed/furnished
 - pages* _____ as amended (together with any statement) under Article 19
 - pages* _____ received by this Authority on _____
 - pages* _____ received by this Authority on _____
 - ☐ the drawings:
 - pages _____ as originally filed/furnished
 - pages* _____ received by this Authority on _____
 - pages* _____ received by this Authority on _____
 - ☐ the sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
 - ☐ the description, pages _____
 - ☐ the claims, Nos. _____
 - ☐ the drawings, sheets _____
 - ☐ the sequence listing (*specify*): _____
 - ☐ any table(s) related to sequence listing (*specify*): _____
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
 - ☐ the description, pages _____
 - ☐ the claims, Nos. _____
 - ☐ the drawings, sheets _____
 - ☐ the sequence listing (*specify*): _____
 - ☐ any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/KR2005/001250

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-36	YES
	Claims	None	NO
Inventive step (IS)	Claims	1-36	YES
	Claims	None	NO
Industrial applicability (IA)	Claims	1-36	YES
	Claims	None	NO

2. Citations and explanations (Rule 70.7)

Reference is made to the following documents:

- D1 : JP 3205115 A2 (MITSUI TOATSU CHEM INC) 6 SEP. 1991
- D2 : JP 1228141 A (TORAY INDUSTRY INC) 5 SEP. 2000
- D3 : WO 00/48830 A1 (TORAY INDUSTRY INC) 24 AUG. 2000
- D4 : WO 00/58083 A1 (CYTEC TECHNOLOGY CORP) 5 OCT. 2000
- D5 : US 527989 A (MITSUBISHI RAYON CO. LTD) 18 JAN. 1994

D1 relates to a fiber reinforcing plastic molded body by utilizing a platelike material formed of fiber-reinforced plastic and thermoplastic resin, wherein a prepreg sheet is integrally molded into the platelike material, which is different from the present invention, since the molded body does not include the continuous reinforcing fiber-impregnated prepreg layer as disclosed in the present invention.

D2 relates to a method of impregnating resin into fiber reinforcing base material comprising the steps of arranging fiber reinforcing base material in the inner or outer surface of a solid core, coating said fiber reinforcing base material with airtight member, vacuuming the interior, and injecting resin, which is different from the present method using prepreg.

D3 and D4 relate to a manufacturing method of a FRP structure body using prepreg, but the prepreg of D3 and D4 differ from the present prepreg. D5 relates to a method comprising the steps of arranging fibrous thermoplastic resin on a basic prepreg obtained from reinforced fiber and thermosetting matrix resin, heating and impregnating the resultant, which is also different from the present method.

Accordingly, the subject matter of claims 1-36 is not disclosed in the cited prior art documents, and is not considered to be easily derived from those documents by a person skilled in the art. Thus claims 1-36 are novel and inventive under PCT Article 33(2) and 33(3).

(2) Industrial Applicability

The subject matter of claims 1-36 is considered to be industrially applicable under PCT Article 33(4).